

GENERIC NAME:

NITROUS OXIDE 50%

112.22

BRAND NAME: Nitronox

CLASS: analgesic, inhalation

Mechanism of Action:

Centrally acting agent that produces CNS depression and elevation of the pain threshold

Indications for Field Use:

Moderate to severe pain from musculoskeletal trauma, burns, AMI

Contraindications:

Unconscious patient

Poor respiratory drive, compromise of respiratory status (i.e. pneumothorax)

Abdominal pain unless intestinal obstruction has been completely ruled out

Severe head injury

Adverse Reactions:

Resp: Worsening of pre-existing pneumothorax; may cause hypercarbia in oxygen sensitive patients (CO₂ retainers).

GI: Nausea and vomiting, may lead to rupture of intestine if administered to patient with intestinal obstruction.

NOTES ON ADMINISTRATION

Incompatibilities/Drug Interactions:

Analgesic effect of nitrous oxide is potentiated by parenteral analgesics and sedatives (i.e. morphine, diazepam).

Adult Dosage:

Self-administer and self-regulated by the patient, who must hold the mask to face to create an airtight seal until the pain is significantly relieved or the patient drops the mask.

Pediatric Dosage:

Must be old enough to follow the instructions for use and large enough that the mask creates an airtight seal.

GD-051-PHS-EMS: Drug Profile for Nitrous Oxide 50%

Routes of Administration:

Self-administered via mask

Onset of Action:

Within a few breaths

Peak Effects:

Not available

Duration of Action:

1-2 minutes

Dosage Forms/Packaging:

Nitrous oxide machine that delivers a fixed ration of nitrous oxide and oxygen (50:50) utilizing a mixing valve with separate tanks of N₂O and O₂ with a fail safe device (O₂ tank empty, no nitrous flows) and a self-administration mask

Arizona Drug Box Supply Range:

PARAMEDIC: Optional item and kept outside of box due to size
INTERMEDIATE: Optional item and kept outside of box due to size

Special Notes:

- > Does not work well for short periods of intense pain
- > Does not mask serious conditions
- > Must be self-administered by the patient